Docket No.: S1022.81243US00

Do not property

AMENDMENTS TO THE CLAIMS

Applicant submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently amended) A method comprising:

for transmitting <u>first</u> digital messages <u>to an analysis tool from a monitoring circuit</u> integrated with a microprocessor, the <u>first digital messages being which are</u> representative of first specific events <u>depending which depend</u> on <u>the execution of an instruction sequence</u> by the microprocessor to an analysis tool through output terminals of a monitoring circuit integrated with a microprocessor;

transmitting to the monitoring circuit, through dedicated accesses: a request signal for the sending of a message associated with a specific event from detecting, with a request circuit, at least one second specific events event which are independent from the execution of the instruction sequence by the microprocessor;

transmitting to the monitoring circuit, when the at least one second specific event is detected, a signal of characteristic data signal associated with said specific event from said at least one second specific events event;

having storing the characteristic data signal in the monitoring circuit, read said-request message and, if resource management conditions are fulfilled, transmitting through a dedicated access an acknowledgement message signal to the request circuit, and storing said characteristic data signal;

transmitting a <u>at least one second</u> digital message representative of the stored characteristic data signal to the analysis tool; <u>and</u>

processing the first digital messages and the at least one second digital message via the analysis tool to analyze operation of the microprocessor and the at least one second specific event.